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09/223,431	12/30/1998	DANIEL S. KWOH	33853/PYI/I1	1638

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EXAMINER	
CHIEU, PO LIN	
ART UNIT	PAPER NUMBER

2615  
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/223,431	KWOH ET AL.
	Examiner	Art Unit
	Polin Chieu	2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 02 October 2002.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-3,7,10-15,17,19-22 and 25-72 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,7,10-15,17,19-22 and 25-72 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in US on 4/26/96. It is noted, however, that applicant has not filed a certified copy of the PCT/US96/05767 application as required by 35 U.S.C. 119(b).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 20, 22, 25-29, 41, 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al (5,956,458) in view of Yamagami (6,334,025) and Lemaire et al (5,444,768).

Regarding claims 1, 22, 25-26, 29, and 43-45 Sezan et al discloses recording video programs on a recording medium (fig. 1); generating audio signals of titles for the recorded programs (92, fig. 4); displaying on a screen a directory of the video programs recorded on the recording medium (fig. 4); and selecting one of the video programs from the directory (col. 4, lines 1-7). However, Sezan et al does not disclose converting the audio signals to textual title signals and storing the textual title signals; converting a stored textual title signal corresponding to the selected video program to an audio signal to apprise the user of the voice title of the selected video program; and displaying the

voice title designations or textual titles, wherein the tiles are alphanumeric textual signals.

Yamagami teaches converting the audio signals to textual title signals and storing the textual title signals (col. 9, lines 25-30); and displaying the textual titles (fig. 5), wherein the titles are alphanumeric textual signals.

Lemaire et al teaches converting text to an audio signal (col. 9, lines 55-67).

It would have been highly desirable to convert the audio to text to reduce the memory capacity necessary for annotating (col. 9, lines 25-30). It would have been highly desirable to convert the text to audio so that the user could hear the title in the case that the title was difficult to read (e.g. the monitor was small or the title was in a foreign language.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention convert the audio to text; and convert the text to audio in the device of Sezan et al.

Regarding claims 20 and 41, Sezan et al discloses audio titles (col. 5, lines 1-8). However, Sezan et al does not disclose how the audio titles are created.

Yamagami teaches the use of an audio input (20) in figure 1. The examiner takes Official Notice that microphones are a common device used to input audio.

It would have been highly desirable to use a microphone to generate the audio signal since no method for inputting the audio titles is disclosed by Sezan et al, and a microphone is commonly known in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use a microphone in the device of Sezan et al.

Regarding claims 27-28 and 46-47, Sezan et al discloses storing the alphanumeric textual titles in a memory in cassette (MIC). However, Sezan et al does not disclose that the MIC is a RAM; and the textual titles are stored in a memory location separate from the directory of video programs.

The examiner takes Official Notice that RAMs are well known memory devices in the art. Therefore, it would have been obvious to a person of ordinary skill in the art to use a RAM as the MIC. Further the MIC is a separate memory from the tape, which stores the directory (col. 3, lines 41-52).

It would have been highly desirable to use a RAM type memory for the MIC because RAMs are cheap and allow quick access to any data in the memory.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use a RAM to store the textual titles separately in the device of Sezan et al.

4. Claims 2-3, 21, 30-31, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al in view of Yamagami, Lemaire et al, and Doyle (6,058,239).

Regarding claims 2-3, 21, 30-31, and 42, Sezan et al does not disclose that the audio signal is generated and converted to a textual title while the video program is recorded by speaking into a microphone.

As discussed previously, a microphone is well known in the art as an audio input device. Therefore, it would have been obvious to use a microphone as an audio input.

Doyle teaches generating an audio signal while recording the video program in fig. 3. Entering the audio title is part of the recording process of recording the video program; therefore, the generation of the audio signal is considered to occur while the video program is being recorded. The circuit that converts audio to text cannot be part of the image processing circuit because processing of audio and video is different. Since video recording does not require the circuit that converts audio to text, it would have been obvious to convert the audio to text while recording the video program because the circuit would be available and the audio is entered while recording the video program.

It would have been highly desirable to generate audio titles by speaking into a microphone and converting the audio titles to text titles while recording the video program so that the device does not require more time after the recording of the program is completed to add the audio and text titles.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to generate audio using a microphone and converting them to text titles for recording while the video program is recording in the device of Sezan et al.

5. Claims 7, 10-15, 17, 19, and 32-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al in view of Yamagami, Lemarie et al, and Ohno et al (5,761,371).

Regarding claim 7, 10-15, 17, 19, and 32-40, Sezan et al discloses other data including the start position of the recorded program (col. 3, lines 13-28) and voice title designations (col. 5, lines 1-8). However, Sezan et al does not disclose transferring the textual title signals to a RAM for later use to select programs for playback; recording other data with the titles, wherein the other data includes length of the recorded program and day and time of recording; positioning the recording medium at the beginning of a video program; and playing the selected program.

Ohno et al teaches transferring the textual titles to a library memory in figure 5 for later use to select programs for playback (S22, fig. 7); recording other data including length and day and time of recording (fig. 5); positioning the recording medium at the beginning of a video program (S19, fig. 7); and playing the selected program (S14 and S22, fig. 7).

As discussed previously RAMs are well known in the art. The type of memory used for the library memory in Ohno et al and Sezan et al is not stated explicitly. Therefore, it would have been obvious to use any known type of memory available.

It would have been highly desirable to transfer the textual titles to a library memory with other data including length and day and time of recording; and playing back the program from the beginning when it was selected to allow the programs to be easily identified, program data to be easily accessed, and playback the program without the user having to manually locate the program. The additional other data allows the programs to be further distinguished (e.g. in the case that two programs have the same title) by the length and day and time of recording.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include length, day and time data in the other data; transfer the textual titles to a RAM; and playback the selected title when a selection is made in the device of Sezan et al.

6. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen et al (5,488,409) in view of Yamagami.

Yuen et al discloses a RAM (33); a video program control logic controller (21); a microprocessor RAM controller coupled to the RAM and the video program recording control logic controller (31) in figure 1. However, Yuen et al does not disclose an audio input device coupled to the video program recording logic controller and responsive to audio signals; the RAM coupled to the video program recording logic controller through a voice recognition circuit, such that the audio signals are converted to textual signals by the voice recognition circuit under the control of the logic controller and stored in the RAM as textual signals corresponding the video programs.

Yamagami teaches an audio input device (20) that converts the audio signals to textual signals (col. 9, lines 25-30) corresponding to the video programs (fig. 5) by a voice recognition circuit and stored in a memory (fig. 8). It is not explicitly stated that the memory is a RAM; however, RAMs are well known in the art, as discussed previously so it would have been obvious to use a RAM. Yamagami does not disclose the specific coupling that the claims recite. However, it is obvious to one of ordinary skill in the art that many different circuit couplings can be used. For example, the audio input device, voice recognition circuit, RAM, and program recording logic controller

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could be coupled to the microprocessor, wherein the microprocessor routes the data to the desired circuit. Since the microprocessor can direct data to any of the connected circuits they are considered to be coupled together.

It would have been highly desirable to convert audio signals to textual signals so that textual titles can be created without having to type in titles. It would have been highly desirable to have the various circuits coupled together so that data can be routed to the desired circuit easily and quickly.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to convert audio titles to textual signals and record the text to a RAM in the device of Yuen et al.

7. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yuen et al in view of Yamagami and Lemaire et al.

Yuen et al does not disclose a voice synthesizer coupled between the RAM and the video program recording control logic controller so that the textual signals are converted under the control of the RAM controller to an audio signal corresponding to video programs recorded on the recording medium by the voice synthesizer and are output to the audio output device under the control of the video program recording control logic controller.

Lemaire et al teaches converting text to an audio signal (col. 9, lines 55-67). As discussed previously, it is well known in the art to connect various circuits to a microprocessor so that data routing is controlled by the microprocessor. All the circuits in the system are considered to be coupled with each other; therefore, the voice

synthesizer can be considered to be coupled between the RAM and the video program recording control logic controller.

It would have been highly desirable to convert text titles to audio signals so that in the case that text titles are illegible (e.g. because of a small display or they are in a different language) the user can hear the titles.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to convert text titles to audio data in the device of Yuen et al.

8. Claims 50, 57, 59-62, 68, and 70-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al in view of Yamagami.

Regarding claims 50 and 62, Sezan et al discloses a means for recording video programs on a recording medium (fig. 1) and for displaying on a screen a directory of the video programs recorded (fig. 4). However, Sezan et al does not disclose that the directory includes textual titles; and audio processing means, coupled to the means for recording video programs, for generating audio signals of titles for the recorded programs, converting the audio signals to textual title signal, and storing the textual title signals.

Yamagami teaches a directory including textual titles (fig. 5); and audio processing means (20), coupled to the means for recording video programs (fig. 1), for generating audio signals of titles for the recorded programs (fig. 5), converting the audio signals to textual title signals (col. 9, lines 25-30), and storing the textual title signals (fig. 8).

It would have been highly desirable to have a directory including textual titles; and audio processing means so that textual titles can be created without the user having to type in textual titles.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to have a directory including textual titles; and audio processing means in the device of Sezan et al.

Regarding claims 57, 59-61, 68, and 70-72, Sezan et al does not disclose generating audio titles using a microphone; the textual titles are alphanumeric textual signals; and storing the signals in a RAM, wherein the memory is separate from the storage location of the directory.

As discussed previously, microphones are a well known audio input device, and RAMs are well known memory devices; therefore, they would have been obvious to use. Yamagami teaches that the textual titles are alphanumeric textual signals (col. 9, lines 25-30). Sezan et al discloses storing the audio titles in a MIC (col. 5, lines 1-8) separate from the directory of the video programs (col. 3, lines 41-52). Therefore, since the text is related to the audio it would have been obvious to record the text separate from the directory.

It would have been highly desirable to use a microphone and a RAM because the method for generating audio signals and storing the textual titles is not disclosed, and microphones and RAMs are well known method to perform the tasks. It would have been highly desirable to have an alphanumeric textual signal so that the textual titles

can be recorded. It would have been highly desirable to record the text separate from the directory so that the textual titles can be easily retrieved.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to use a RAM and microphone; alphanumeric textual signals; and a separate memory in the device of Sezan et al.

9. Claims 51-52, 58, 63, and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al in view of Yamagami and Doyle.

Regarding claims 51-52, 58, 63, and 69, Sezan et al does not disclose that the audio signal is generated and converted to a textual title while the video program is recorded by speaking into a microphone.

As discussed previously, a microphone is well known in the art as an audio input device. Therefore, it would have been obvious to use a microphone as an audio input.

Doyle teaches generating an audio signal while recording the video program in fig. 3. Entering the audio title is part of the recording process of recording the video program; therefore, the generation of the audio signal is considered to occur while the video program is being recorded. The circuit that converts audio to text cannot be part of the image processing circuit because processing of audio and video is different. Since video recording does not require the circuit that converts audio to text, it would have been obvious to convert the audio to text while recording the video program because the circuit would be available and the audio is entered while recording the video program.

It would have been highly desirable to generate audio titles by speaking into a microphone and converting the audio titles to text titles while recording the video program so that the device does not require more time after the recording of the program is completed to add the audio and text titles.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to generate audio using a microphone and converting them to text titles for recording while the video program is recording in the device of Sezan et al.

10. Claims 53-56 and 64-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan et al in view of Yamagami and Ohno et al.

Regarding claims 53-56 and 64-67, Sezan et al discloses other data to assist in the playback of the recorded program (col. 3, lines 13-28). However, Sezan et al does not disclose transferring the textual title signals to a RAM for later use to select programs for playback; positioning the recording medium at the beginning of a video program; and playing the selected program.

Ohno et al teaches transferring the textual titles to a library memory in figure 5 for later use to select programs for playback (S22, fig. 7); positioning the recording medium at the beginning of a video program (S19, fig. 7); and playing the selected program (S14 and S22, fig. 7).

As discussed previously RAMs are well known in the art. The type of memory used for the library memory in Ohno et al and Sezan et al is not stated explicitly. Therefore, it would have been obvious to use any known type of memory available.

It would have been highly desirable to transfer the textual titles to a library memory with other data to assist playback; and playing back the program from the beginning when it was selected to allow the programs to be easily identified, program data to be easily accessed, and playback the program without the user having to manually locate the program.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to include other data to assist in playback; transfer the textual titles to a RAM; and playback the selected title when a selection is made in the device of Sezan et al.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Polin Chieu whose telephone number is (703) 308-6070. The examiner can normally be reached on M-F 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B. Christensen can be reached on (703) 308-9644. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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PC  
December 14, 2002



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